



ADDENDUM # 1

CITY OF MILPITAS MILPITAS, CALIFORNIA ENGINEERING DIVISION

CONTRACT DOCUMENTS AND SPECIFICATIONS FOR

McCarthy Blvd. Lighting & Landscape Improvements Phase I Project No. 3402

Date: October 14 2014

To: Plan Holders - Prospective Bidders of the subject project

From: Steve Erickson, CIP Manager

SEE CHANGE IN BID DATE & ADDED PRE-BID CONFERENCE

Attached is Addendum # 1 for the subject project. This addendum forms a part of the Contract Documents and modifies the Bid Documents as noted below. Acknowledgement of receipt of this addendum in the space provided in the Proposal is required. Failure to acknowledge an addendum may subject the bidder to disqualification.

At 2:00 PM on October 30, 2014, all bidders will submit their bids as set forth in bid documents and as amended by the following:

ADDENDUM # 1

REFER TO SPECIFICATIONS:

1. Table of Contents

A. Add: Section E-22 "Decorative Metal" to Table of Contents.

B. Add: Section E-23 "Painting & Graffiti-Resistant Coating" to Table of Contents.

2. Section A-01 Notice Inviting Bids, Page 6

A. Replace: Paragraph 1 with the following:

Notice is hereby given that the City of Milpitas shall receive sealed bids at City Hall, 1st floor Information Service Counter, 455 E. Calaveras Boulevard, Milpitas Ca, 95035 between the hours of 12:00 p.m. and 2:00 p.m. on **October 30, 2014**. In accordance with Section 4104.5 of the Public Contract Code, bids received after the time specified in this notice shall be returned unopened. Bids received by the time specified will be opened in public at or about that hour for: McCarthy Blvd. Lighting & Landscape Improvements Phase 1 Project No. 3402 all as more particularly set forth in the drawings and specifications on file in the office of the City Engineer.

B. Replace: Paragraph 2 with the following:

Bidders wishing to submit bids prior to 12:00 p.m. on **October 30, 2014** must contact (408) 586-3300 to arrange for receipt and drop off.

C. Replace: Paragraph 5 with the following:

Contractors bidding the project are required to attend the mandatory pre-bid conference prior to bidding. The pre-bid conference is scheduled for 10:00 am on Thursday October 2, 2014, 2:00 pm on Tuesday October 7, 2014, **and 10:00 am on Tuesday October 21, 2014** and will be located on the northwest corner of Ranch Dr /McCarthy Blvd intersection. Bids will not be accepted from contractors that do not attend one of the pre-bid meetings.

C. Replace: Paragraph 13 with the following:

Proposals will be reviewed by the City Engineer and scheduled to be presented to the City Council at the meeting of **November 18, 2014** or thereafter, at which time the Council may accept or reject bids.

3. Section A-07 Proposal, Page 17

A. Replace: Section A-07 Proposal with new proposal A-07R (pages 16-19) see attached.

4. **Section E-21 Landscape Planting, Page 201**

A. Replace: Paragraph 10 with the following:

2. Shrubs/Groundcover in 1-gallon shall be measured on a per item basis including excavation, soils testing, soil preparation, soil amendments, **imported top soil**, fertilizers, maintenance, erosion control netting, and 1 year plant warranty associated with planting.

B. Replace: Paragraph 11 with the following:

3. Shrubs in a 2-gallon shall be measured on a per item basis including excavation, soils testing, soil preparation, soil amendments, **imported top soil**, fertilizers, maintenance, erosion control netting, and 1 year plant warranty associated with planting.

C. Replace: Paragraph 12 with the following:

4. Shrubs in a 5-gallon shall be measured on a per item basis including excavation, soils testing, soil preparation, soil amendments, **imported top soil**, fertilizers, maintenance, erosion control netting, and 1 year plant warranty associated with planting.

D. Replace: Paragraph 13 with the following:

5. 24" Box Trees shall be measured on a per item basis including excavation, soil preparation, soil amendments, root barriers, **imported top soil**, fertilizers, staking, tree ties, pruning, maintenance, and 1 year warranty associated with tree planting.

5. **Specifications**

A. Add: Section E-22 "Decorative Metal" (total 5 pages) see attached.

B. Add: Section E-23 "Painting & Graffiti-Resistant Coating" (total 11 pages) see attached.

REFER TO PLANS:

1. **Demolition Plan Sheet L1.3**

A. Replace: Sheet L1.3 with L1.3-R see attached.

2. **Planting and Layout Plan Sheet L2.3**

A. Replace: Sheet L2.3 with L2.3-R see attached.

3. **Irrigation Sheets L3.1-L3.8**

A. Revise: "California Department of Health" replaced with "SWRCB Division of Drinking Water" in review signature block.

4. **Irrigation Calculations Sheets L3.9-L3.12**

A. Remove: CDPH/SBWR signature blocks.

5. **Landscape Details Sheets L4.2**

A. Replace: Sheet L4.2 with L4.2-R see attached.

RESPONSE TO CONTRACTORS RFI's:

Question 1: Sheet L1.1 (Demolition plan) states "Existing Decomposed Granite to be removed including subbase to the depth appropriate for new planting area installation (12" Min.) typ." There is no bid item for earthwork or import topsoil. In which bid item shall I include the min. 12" backfill?

Response to #1: The backfill work would be covered in E-21 of the technical specifications. Depending on the proposed planting application where backfill replacement it would be split between base bid 11-15.

Question 2: Per plan sheet L2.3 "Existing fence/sign to remain, move back 3 ft" and "Replace damaged fence panel". Which bid item do we bid this work as?

Response to #2: Fence panel replacement to be on bid item 16. Refer to Section E-22 "Decorative Metal" and Section E-23 "Painting & Graffiti-Resistant Coating" for further details.

LIST OF ATTACHMENTS TO ADDENDUM #1

Pre-bid Meeting Sign in Sheet, dated October 2, 2014 (1 page)

Pre-bid Meeting Sign in Sheet, dated October 7, 2014 (1 page)

Section A-07R Proposal (4 pages)

Section E-22 Decorative Metal (5 pages)

Section E-23 Painting & Graffiti-Resistant Coating (11 pages)

Plan sheet L1.3-R

Plan sheet L2.3-R

Plan sheet L4.2-R

Bids will not be accepted from Contractors that did not attend at least one of the pre-bid meetings.

END OF ADDENDUM #1

This addendum shall be signed by each bidder and kept for their files. Acknowledgement of receipt of this addendum in the space provided in the Proposal is required. Failure to acknowledge an addendum may subject the bidder to disqualification.

I,

representing

have carefully read this addendum, understand it, acknowledge receipt of this addendum and will comply its terms.

This addendum is issued by Steve Erickson, CIP Manager



for the City of Milpitas, on October 14, 2014

McCarthy Blvd. Lighting & Landscape Improvements Phase 1
 Projects 3402
 Pre-bid Meeting
 Thursday October 2, 2014 10:00 am

Name	Company	Contractors Lic. #	Phone	email
1) ANGIE RAMOS Manuel Resendiz	Robert A. Bothman	440332	(408) 279-2277	
2) Annette Lopez	St. Francis Electric	3	408-663-3127	
3) ✓				
4)				
5)				
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				
14)				
15)				

McCarthy Blvd. Lighting & Landscape Improvements Phase 1
Projects 3402
Pre-bid Meeting
Tuesday October 7, 2014 2:00 pm

Name	Company	Contractors Lic. #	Phone	email
1) Angie Ramos Manuel Resendiz	ROBERT A. BOTHMAN	440332	408 279-2277	aramos@bothman.com
2) John Suarez	Suarez & Munoz Const. Inc	873996	(510) 732-6065	john@suarozmunoz.c
3)				
4)				
5)				
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				
14)				
15)				

A-07R PROPOSAL

I/We agree to perform the above entitled work in accordance with Plans and Specifications of the City of Milpitas for the prices listed below:

Bid Item No	Estimated Quantity	Unit	Item Description	Unit Price	Extension
1 Section E-03	1	LS	Mobilization (Max 5% of total base bid)	\$ _____	\$ _____
2 Section E-04	1	LS	Traffic Control (Max 5% of total base bid)	\$ _____	\$ _____
3 Section E-10	1	LS	Water Pollution Control Work	\$ _____	\$ _____
4 Section E-11	1	LS	Tree Preservation and Pruning	\$ _____	\$ _____
5 Section E-12	795	SF	Color Stamped Concrete Median	\$ _____	\$ _____
6 Section E-12	700	SF	Concrete median Maintenance Band	\$ _____	\$ _____
7 Section E-17	1	LS	Lighting	\$ _____	\$ _____
8 Section E-18	1	LS	Clearing, Grubbing, Disposal and Miscellaneous Demolition	\$ _____	\$ _____
9 Section E-19	1	LS	Decomposed Granite Paving	\$ _____	\$ _____
10 Section E-20	1	LS	Irrigation System	\$ _____	\$ _____
11 Section E-21	1	LS	3" Top Mulch	\$ _____	\$ _____

12	842	EA	1 Gallon Shrub/Groundcover	\$ _____	\$ _____
Section E-21					
13	8	EA	2 Gallon Shrub	\$ _____	\$ _____
Section E-21					
14	485	EA	5 Gallon Shrub	\$ _____	\$ _____
Section E-21					
15	18	EA	24" Box Tree	\$ _____	\$ _____
Section E-21					
16	16	LF	Metal Rail	\$ _____	\$ _____
Section E-22					

BASE CONTRACT TOTAL
(Basis for Determining Low Bid)

\$ _____

_____ dollars & cents
 (Spell Out)

FOR ADD ALTERNATE BID ITEMS:

- 1) All schedules (bid items) must be bid, and Add Alternate bid items will not be awarded independent of Base Contract.
- 2) Add alternate bid items, if accepted, shall be included in the contract and the amount for each one selected shall be adjusted from the Base Contract. The City shall have sole discretion in determining the selection of add alternate bid items.
- 3) In accordance with Section 20103.8 of the Public Contract Code, the contract will be awarded on the basis of the lowest bid shall be the lowest bid price on the Base Contract without consideration of the prices on the additive or deductive items.
- 4) Add alternate bid item amount(s) will be included in the contract and adjusted from the Base Contract if accepted at the time of award.

Item No	Estimated Quantity	Unit	ADD ALTERNATES *	Unit Price	Extension
			Item Description		

A	1	LS	Removal of existing perimeter decomposed granite paving at Southeast Corner (including header & sub-base) and install new Concrete walks at Southeast Corner	\$ _____	\$ _____

- 1) In accordance with Section 1103 of the Public Contract Code, a "Responsible bidder," as used in this part, means a bidder who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the public works contract.
- 2) In accordance with Section 20170 & 20171 of the Public Contract Code, all proposals or bids shall be accompanied by one of the following forms of bidder's security:
 - a. Cash.
 - b. Cashier's check drawn upon a responsible bank made payable to the city.
 - c. A certified check from a responsible bank properly certified and made payable to the city.
 - d. A bidder's bond executed by an admitted surety insurer, made payable to the city.
- 3) A bid shall not be considered unless one of the forms of bidder's security is enclosed with it.
- 4) The sum of bidders security shall not be less than ten (10) per cent of the aggregate sum of the bid, which check or bond, and moneys represented thereby shall be held by the City as guarantee that the bidder, if awarded the contract, will in good faith enter into such contract and furnish the required bonds.
- 5) For lump sum items, refer to the Schedule of Values requirements in the General Provisions.
- 6) In case of any inconsistency or conflict between summation of the base bid extensions and the total base bid amount, the correct mathematical summation of the base bid extensions shall govern.
- 7) In case of any inconsistency or conflict between unit prices and the extension, unit prices will prevail regardless of extensions submitted by Bidder.
- 8) In case of any inconsistency or conflict between words and figures submitted by bidder in the total base bid section, the words shall govern, subject to the two rules above.
- 9) It is understood that the estimated quantities of work to be done hereinabove set forth are approximate only, being given as a basis for the comparison of bids, and the City of Milpitas does not expressly or by implication agree that the actual amount of work will correspond therewith, but reserves the right to increase the amount of any class or portion of the work or to omit portions of the work as may be deemed necessary or expedient by the Engineer.
- 10) All bids will be compared on the basis of the Engineer's Estimate of the quantities of the work to be done, and the City reserves the right to reject any and all bids.
- 11) A bidder may not withdraw its bid for a period of ninety (90) days from the date of opening, and the bid shall remain valid during this period of time.
- 12) The undersigned has carefully checked all of the above figures and understands that the City shall not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

- 13) If this proposal shall be accepted and the undersigned shall fail to contract as aforesaid and to furnish bonds as provided in said specifications, with sureties satisfactory to the City, within fifteen (15) days after the bidder has received notice from said City that the contract is ready for signature, the City may, at its option, determine that the bidder has abandoned the contract, and the forfeiture of such security accompanying this proposal shall operate and the same shall be the property of the City.
- 14) The contract, if awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed, and who complies with requirements of timely execution and return of the contract together with contract bonds, as determined by the City.
- 15) A Notice to Proceed will be issued after the contract is fully executed, the City has received all required bonding and insurance certificates, and the Contractor has completed all other requirements required prior to issuance of the Notice to Proceed as specified in these Contract Documents and specifications.
- 16) The Contractor shall commence work under the contract within (5) days following the Notice to Proceed. The Contractor shall diligently prosecute the work to completion as specified in these Contract Documents and specifications. The contract completion time is inclusive of the time for delivery of materials.

E-22 DECORATIVE METAL

General:

Summary:

- A. Work included: Furnish materials and perform labor required to execute this work as indicated on the drawings, as specified, and as necessary to complete the Contract, including, but not limited to, these major items:
 - 1. Shapes, sleeves, anchors, connectors, plates, rails, edges, items embedded in concrete required, but which are not specified in other sections.
 - 2. Metal posts.
 - 3. Primer for metal items which are not galvanized.
 - 4. Welding
 - 5. Finishing
- B. Examine all drawings and specifications and include all miscellaneous metal which is specified in other sections. Provide all connections, anchors, bolts, and other fastenings as required. Do all cutting, punching, drilling and tapping required for proper assembly of the work.

References:

- A. ASTM A123 - Zinc (Hot Galvanized) coatings on Products fabricated from rolled, pressed and forged shapes, plates, bars, and strip.
- B. ASTM A153 - Zinc coating (Hot Dip) on iron and steel hardware.
- C. ASTM A386 - Zinc coating (Hot Dip) on assembled steel products.
- D. ANSI B 18.22.1 – Plane Washers.
- E. ANSI B 18.23.1 – Bevelled Washers.
- F. ASTM A36 – Structural Steel.
- G. ASTM A53 - Hot-Dipped, Zinc-coated Welded and Seamless Steel Pipe.
- H. ASTM A108 - Steel Bars, Carbon, Cold-Finished, Standard Quality.
- I. ASTM A307 - Carbon Steel Externally Threaded Standard Fasteners.
- J. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Round and Shapes.
- K. ASTM A563 – Carbon and Alloy Steel Nuts.
- L. AWS A2.0 – Standard Welding Symbols.
- M. AWS D1.1 – Standard Welding code.
- N. CCR - California Code of Regulations: Title 8, General Safety Order.
- O. CCR – California Code of Regulations – Title 24.
- P. SSPC – Steel Structure Painting Council.

Submittals:

- A. Shop Drawings: Indicate profiles, edge and joint conditions, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories.

Field Measurements:

- A. Welder's Certifications: Submit under provisions of Division 1, certifying welders employed on the Work, verifying AWS qualification within the previous 12 months.
- B. Manufacturer's Certificate: Certify that size and type of anchor bolts, expansion anchors, and studs for connection to concrete and concrete block are suitable for the type of substrate and intended purpose.
- C. Verify that field measurements are as indicated on shop drawings.

Quality Assurance:

- A. References:

1. American Society of Testing and Materials (ASTM)
 2. American Welding Society (AWS)
 3. American Institute of Steel Construction (AISC)
- B. Field measurement: Verify drawing dimensions with actual field conditions. Inspect related work and adjacent surfaces. Report to the City Representative all conditions, which prevent proper execution of this work.
- C. Shop assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordination of installation.

Products:

Materials:

- A. Steel shapes: conform to ASTM A36.
- B. Steel tubing: ASTM A500, Grade B.
- C. Steel pipe: conform to ASTM A53, Grade B. Schedule 40.
- D. Malleable iron castings: conform to ASTM A47.
- E. Welding rods: conform to requirements of AWS for intended use.
- F. Steel plate: conform to ASTM A283, Grade A.
- G. Steel tubing: conform to ASTM A501.
- H. Bolts, Nuts, and Washers: ASTM A325 and A307, galvanized as follows:

For A307 items: Zinc electroplated per ASTM B633.

- I. Touch-up for galvanized surfaces: All State #321 Galvanizing Powder (30% tin, 30% zinc, 40% lead and flux).
- J. Miscellaneous material: as indicated or specified.
- K. Expansion Anchors
 1. Proprietary type designed for intended use (only where indicated).
 - a. ITT Phillips Drill Division "Red Head Hedge or Sleeve Anchor".
 - b. Ramset Fastener Systems "Ramdrill".
 - c. Hilti Co. "Kwik Bolt II" as applicable.
 - d. Or equal. The Contractor will comply with applicable portions of the General Conditions and Special Conditions, including but not limited to GC-41 Product Options, Supplier Approval, and Substitutions and SC-6 Contract Data Requirements.
 2. Bolt Size: per manufacturer for each application unless indicated otherwise. See certification requirements, above in Submittals.
 3. Embed Anchors: ASTM A36, galvanized
- L. Welding Materials: AWS D1.1; type required for materials being welded.

M. Shop and Touch-Up Primer

1. Tnemec Co., "No.P10-99 Metal Primer".
2. Rust-Oleum Co., "No 769 Demo-Proof Red Primer".
3. Porter International "260FD".
4. Or equal. The Contractor will comply with applicable portions of the General Conditions and Special Conditions, including but not limited to GC-41 Product Options, Supplier Approval, and Substitutions and SC-6 Contract Data Requirements.

N. Touch-Up Primer for Galvanized Surfaces: MS DOD-P21035, high zinc dust content paint.

O. Temporary Supports, Staying and Spacing: As required by project conditions.

P. Shims and Leveling Devices: As required by project conditions.

Q. Metal Lath: ASTM C847; flat diamond mesh or as detailed on drawings; flat rib, 3/8 inch; galvanized steel, 3.4 pounds per sq. /yards.

Fabrication:

- A. Fit and shop assemble in largest practical sections, for delivery to site.
- B. Fabricate items with joints tightly fitted and secured. On finished surfaces, grind all welds smooth and flush with base metal
- C. Exposed Mechanical Fastenings: Flush countersunk stainless steel screws or bolts; concealed where possible; consistent with design of component, except where specifically noted otherwise.
- D. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise. Where items are to be embedded in concrete or masonry, provide welded-on anchors or lugs as indicated or required
- E. Assemble to give ample strength and stiffness.
- F. Scribe and fit for best appearance where exposed.

Finishes:

A. Surface Preparation:

1. Grind weld spatter and sharp edges smooth prior to cleaning.
2. Prior to application of primer, clean surfaces as follows:
3. Steel to be encased in masonry or concrete: Hand tool cleaning per SSPC SP-2.
4. Steel to remain exposed in the completed work: Brush off blast cleaning per SSPC SP-7.

B. Shop Primer:

1. Apply shop primer within 4 hours of surface cleaning.
2. Apply minimum 3 mils dry film thickness of primer to steel, unless otherwise specified.
3. Do not apply primer within two inches of steel assemblies, which are embedded in concrete.

4. Apply two coats of primer to steel assemblies, which are concealed in the finish work.
5. Touch-up shop primer of poor quality or insufficient thickness to a condition acceptable to Valley Transportation Authority Representative.

C. Galvanized Finish: Minimum 2 oz/sq. ft zinc coating in accordance with ASTM A386.

Execution:

Examination:

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. Beginning of installation means erector accepts existing conditions.

Fabrication:

- A. Shop Assembly: Preassemble items in shop to greatest possible extent to minimize splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordination of installation.
- B. Fabricate items with joints tightly fitted and secured.
- C. Weld all shop connections. Welds shall be smooth, continuous beads, free to excessive roughness and spatter. Grind surface welds smooth and flush to match and blend with parent metal surfaces.
- D. Exposed Mechanical Fastenings: Flush countersunk stainless steel screws or bolts; concealed where possible; consistent with design of component, except where specifically noted otherwise.
- E. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabricated, except where specifically noted otherwise.
- F. Assemble to give ample strength and stiffness.
- G. Scribe and fit for best appearance where exposed.

Installation:

- A. Install items plumb and level, accurately fitted, free from distortion or defects and securely and rigidly attached to supporting construction and as detailed.
- B. Allow for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. All welding shall conform to requirements of the Committee for Standard Tests for Welds of the American Welding Society. All welding shall be electric arc process. Welds exposed in finish work shall be filled out flush, ground and dressed. Welders for structural shall be certified.
- D. Verify that field conditions are acceptable and are ready to receive work.
- E. Install items plumb and level, accurately fitted, free from distortion or defects.
- F. Connections and anchors shall be adequate to sustain normal loads which may be imposed, securely welded or bolted, conforming to AISC standards. Excess length of bolts where exposed to view to be cut off and ground smooth. Use spacer washers when fastening through finish materials.
- G. Where field welding is required properly prepare area and use approved materials and method to provide durable, long lasting protection against rust.

- H. After erection, prime welds, abrasions, and surfaces not shop primed or galvanized, except surfaces to be in contact with concrete.
- I. Prime and paint steel work as required. Paint or primer that ruins orange peel finish or poor finishing shall result in removal of fishiness and repainting by contractor.

Warranty:

- A. Warranty: 1 year including against rust.

Measurement and payment:

Measurement:

- A. Metal rail shall be measured on a linear foot basis including paint for new and existing metal rail to remain.

Payment:

- A. The contract price per linear foot shall include full compensation for conforming to the requirements of "decorative metal" including furnishing all labor, materials, tools, equipment, and incidentals necessary for metal rail, as shown on the plans, as specified in these technical provisions, and as directed by the engineer shall be considered as included in the contract unit bid price for "decorative metal" and no additional allowance will be made therefore. Payment for "decorative metal" shall also include "E-23 Painting & Graffiti-resistant Coating" as part of the contract unit bid price.

E-23 PAINTING & GRAFFITI-RESISTANT COATING

General:

Related Documents:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

Section Includes:

- A. Surface preparation, painting, and finishing of exposed interior and exterior items and surfaces.
- B. Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.
- C. Painting exposed surfaces whether or not colors are designated in schedules, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.
- D. Painting includes field-painting exposed bare and covered pipes and ducts (including color coding), hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment.
- E. Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.
- F. Labels: Do not paint over Underwriters Laboratories, Factory Mutual or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

Definitions:

- A. VOC Ranges: Ranges listed are as prescribed by Master Painters Institute (MPI), Architectural Painting Specification Manual as follows:
 - 1. VOC Range E3: Lowest.
 - 2. VOC Range E2: Next lowest.
 - 3. VOC Range E1: Highest allowable.
 - 4. VOC Range E0: Outside range.
- B. General: Standard coating terms defined in ASTM D16 apply to this section.
 - 1. Low Gloss refers to a 'velvet-like' finish with a gloss maximum of 10 when measured with a 60-degree meter.
 - 2. Eggshell refers to a low-sheen finish with a gloss range between 5 and 20 when measured with a 60-degree meter.
 - 3. Satin refers to a low-sheen finish with a gloss range between 15 and 35 when measured with a 60-degree meter.
 - 4. Semi-gloss refers to a satin-like finish with a gloss range between 20 and 35 when measured with a 60-degree meter.
 - 5. Full gloss refers to a high-sheen finish with a gloss range higher than 65 when measured with a 60-degree meter.

Submittals:

- A. Product Data: For each paint system specified.

1. **Material List:** Provide an inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and coating material proposed for use.
 2. **Manufacturer's Information:** Provide manufacturer's technical information, including label analysis and instructions for handling, storing and applying each coating material proposed for use.
 3. **Certification by the manufacturer** that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).
- B. **Application Qualifications:** Submit qualifications for applicator as follows:
1. Certification stating applicator is experienced in the application of the specified products.
 2. List of recently completed graffiti-resistant coating projects, including project name, location, name of owner and architect, description of product used, substrates, applicable local environmental regulations, and application procedures.
- C. **Samples for Verification Purposes:** Provide samples of each color and material to be applied, with texture to simulate actual conditions, on representative samples of the actual substrate.
- D. **Product Data Sheets and MSDS** for each product to be used meeting U.S.G.B.C. requirements of either Green Seal's GS-11 or GC-03 documents.
- E. **Closeout Submittal:** Provide paint cards fully labeled with manufacturer of each paint system applied on the project. Provide the following with each system:
1. Manufacturer name.
 2. Manufacturer's paint product.
 3. Primer name and number.
 4. Color name and number.
 5. Gloss level.
 6. Locations where used.

Quality Assurance:

- A. **Single-Source Responsibility:** Provide primers and undercoat paint produced by the same manufacturer as the finish coats.
- B. **Mock-ups:**
1. Provide field samples of each color and finish, 36 sq ft minimum each in location of final installation.
 2. Apply graffiti-resistant coating to test panels in accordance with manufacturer's written instructions. Allow 48 hours or until test panels are thoroughly dry before evaluating final appearance and results. Do not begin full-scale application until test panels are approved by the Landscape Architect.
- C. **Pre-installation Meeting:** Convene a pre-installation meeting one week before the start of application of graffiti resistant coatings. Require attendance of parties directly affecting the work of this section, including the Contractor, Architect, applicator and his foreman, and manufacturer's representative. Items to review include, but are not limited to the following:
1. Environmental regulations.
 2. Test panel procedures.
 3. Protection of surrounding areas not scheduled to receive coating.
 4. Surface preparation.

5. Application procedures.
6. Field quality control.
7. Final cleaning.
8. Coordination with other work.

D. Coordination: Coordinate related trades for installation of the Work. Advise brick and plaster trades on proper cleaning and protection of their materials for successful application of graffiti-resistant coating.

E. Final approval of finishes will be made from benchmark samples.

Delivery, Storage, and Handling:

A. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:

1. Product name or title of material.
2. Product description (generic classification or binder type).
3. Manufacturer's stock number and date of manufacture.
4. Contents by volume, for pigment and vehicle constituents.
5. Thinning instructions.
6. Application instructions.
7. Color name and number.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.

C. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

Project Conditions:

A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F (10 deg C) and 90 deg F (32 deg C).

B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 deg F (7 deg C) and 95 deg F (35 deg C).

C. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

D. Rain Conditions: Do not apply earlier than 24 hours after rain or if rain is predicted for a period of 8 hours after application, unless otherwise indicated in manufacturer's written instructions.

E. Wind Conditions: Do not apply under windy conditions such that the graffiti-resistant coating may be blown to surfaces, either on site or off, not intended to be treated.

F. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by the manufacturer during application and drying periods.

Products:

Manufacturers:

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Benjamin Moore; Pristine EcoSpec.
 2. ICI Paint Stores, Inc.; Life Master.
 3. Kelly-Moore Enviro-Cote.
 4. Sherwin-Williams; Harmony Coating System.
 5. PPG Architectural Finishes; Pure Performance.
- B. Available Manufacturers and Products for Graffiti-Resistant Coatings: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following, or approved equal:
1. Professional Products of Kansas, Inc.; "Professional Water Sealant and Anti-Graffiti System".
 2. ProSoCo, Inc.; "Block Guard and Graffiti Control II".

Paint Materials:

- A. Material Compatibility: Provide block fillers, primers, finish coat materials, and related materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by the manufacturer based on testing and field experience.
- B. Material Quality: Provide the manufacturer's best-quality trade sale paint material of the various coating types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable.
- C. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish the manufacturer's material data and certificates of performance for proposed substitutions.
- D. Colors: Match colors indicated by reference to the manufacturer's standard color designations.
- E. Chemical Components of Field-Applied Interior Paints and Coatings: Provide products that comply with the following limits for VOC content, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24) and the following chemical restrictions; these requirements do not apply to primers or finishes that are applied in a fabrication or finishing shop:
1. Flat Paints and Coatings: VOC content of not more than 50 g/L.
 2. Nonflat Paints and Coatings: VOC content of not more than 150 g/L.
 3. Aromatic Compounds: Paints and coatings shall not contain more than 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).
 4. Restricted Components: Paints and coatings shall not contain any of the following:
 - a. Acrolein.
 - b. Acrylonitrile.
 - c. Antimony.
 - d. Benzene.
 - e. Butyl benzyl phthalate.
 - f. Cadmium.
 - g. Di (2-ethylhexyl) phthalate.
 - h. Di-n-butyl phthalate.
 - i. Di-n-octyl phthalate.
 - j. 1,2-dichlorobenzene.
 - k. Diethyl phthalate.

- l. Dimethyl phthalate.
- m. Ethylbenzene.
- n. Formaldehyde.
- o. Hexavalent chromium.
- p. Isophorone.
- q. Lead.
- r. Mercury.
- s. Methyl ethyl ketone.
- t. Methyl isobutyl ketone.
- u. Methylene chloride.
- v. Naphthalene.
- w. Toluene (methylbenzene).
- x. 1,1,1-trichloroethane.
- y. Vinyl chloride.

Primers:

- A. Primers: Provide the manufacturer's recommended factory-formulated primers that are compatible with the substrate and finish coats indicated.
 - 1. VOC Content: E Range of E2-E3.
- B. Concrete Primers: Factory-formulated alkali-resistant acrylic-latex primer.
- C. Ferrous Metal Primers: Factory-formulated rust-inhibitive alkyd-based metal primer. Use quick drying type at interior applications.
- D. Galvanized Metal Primers: Factory-formulated galvanized metal primer.
- E. Interior Gypsum Board Primer: Factory-formulated white latex-based primer for interior application.

Undercoat Materials:

- A. Undercoat Materials: Provide the manufacturer's recommended factory-formulated undercoat materials that are compatible with the substrate and finish coats indicated.
 - 1. VOC Content: E Range of E3.

Exterior Finish Paint Material:

- A. Finish Paint: Provide the manufacturer's recommended factory-formulated finish-coat materials that are compatible with the substrate and undercoats indicated.
 - 1. VOC Content: E Range of E2-E3.
- B. Exterior Acrylic Emulsion: Quick-drying, flat, acrylic paint.
- C. Gloss Alkyd Enamel on Exterior Ferrous Metal: Weather-resistant, high-gloss enamel.
- D. Lusterless Alkyd Enamel on Prime-coated, Ferrous Metal: Flat, alkyd-based enamel.

Graffiti-Resistant Coating:

- A. Material Characteristics: ASTM D6578; and the following:
 - 1. Silicone elastomer graffiti control coating.
 - 2. Compliant with California VOC regulations.

3. Clear, single component.
4. Non-yellowing.
5. Non-glossy penetrating liquid forming a durable invisible barrier.
6. Specifically designed for porous masonry and plaster to provide protection against water and waterborne staining.
7. Vapor permeable.
8. Non-sacrificial type coating.
9. Efflorescence-inhibiting.

B. Material Quality: Provide manufacturer's best-quality material for each coating material specified.

Execution:

Examination:

- A. Examine substrates and conditions under which painting will be performed for compliance with paint application requirements. Surfaces receiving paint must be thoroughly dry before paint is applied.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
- C. Notify the Architect about anticipated problems using the materials specified over substrates primed by others.
- D. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 1. Concrete: 12 percent.
 2. Wood: 15 percent.
 3. Gypsum Board: 12 percent.
 4. Plaster: 12 percent.
- E. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
- F. Beginning coating application constitutes acceptance of substrates and conditions.

Preparation, General:

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted, or provide surface-applied protection prior to surface preparation and painting. Remove these items, if necessary, to completely paint the items and adjacent surfaces.
- B. Apply paint and graffiti-resistant coating on new and existing metal rail as noted on plans.
- C. Protect surrounding areas, landscaping, pedestrians, vehicles, and other surfaces not designated to receive coating during the work from contact with graffiti-resistant coatings, masonry or concrete cleaners if used, residues, rinse water, fumes, wastes, and effluents in accordance with manufacturer's written instructions.
- D. Protect surrounding painted surfaces, metal, glass, foliage, and items from damage due to contact with graffiti coatings, in accordance with manufacturer's written recommendations.

- E. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease prior to cleaning. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- F. Repair, patch, and fill all cracks, voids, defects, and damaged areas in surfaces as approved by the Architect. Allow repair materials to cure completely before application of graffiti-resistant coatings.
- G. Apply specified sealants and allow to cure completely before application of coating.
- H. Provide barrier coats over incompatible primers or remove and reprime. Notify Architect in writing about anticipated problems using the specified finish-coat material with substrates primed by others.
- I. Follow proper procedures, methods, guidelines, and regulations for paint preparation related to lead paint sanding. Wear goggles, NIOSH-approved respirators, rubber gloves, and appropriate clothing.
- J. Clean building exterior using pressurized hot water.
 - 1. Clean heavily soiled areas with fiber brush and water.
 - 2. Equip pressure washer with fan tip nozzle of 250 degree minimum.
 - 3. Do not permit water temperature to exceed 180 degrees F.
 - 4. Do not permit water pressure to exceed 1,200 psi.
- K. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's printed directions.
- L. Exposed Equipment: Verify installations are complete before initiating preparation of surfaces of exposed mechanical and electrical piping, conduit, ductwork, and equipment for field-painting.
- M. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.
- N. Factory-Primed and Enamel Substrates: Wipe clean and dry.
- O. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.
- P. Allow repointed surfaces to cure completely before application of coating.

Surface Preparation:

- A. Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
- B. Steel Substrates: Clean ungalvanized ferrous metal surfaces that have not been shop-coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council (SSPC) and written instructions of paint manufacturer.
 - 1. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.

2. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by paint manufacturer, and touch up with the same primer as the shop coat.
- C. Galvanized-Metal Substrates: Clean galvanized surfaces with nonpetroleum-based solvents so that the surface is free of oil and surface contaminants. Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
1. Treat exterior galvanized surfaces according to SSPC SP-7 and interior galvanized surfaces to SSPS SP-1.
- D. Apply primers to metal surfaces in the field under any of the following circumstances:
1. Where it can be established that shop primer was applied more than 30 days (7 days for some primers, verify with metal shop) before delivery to the site.
 2. If shop-applied primer is contaminated during transport or storage.
 3. If salts are deposited from marine fog, road salts, construction dusts, etc. during storage.
- E. Cementitious Materials: Prepare concrete masonry surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents.
1. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's written instructions.

Materials Preparation:

- A. Carefully mix and prepare paint materials according to manufacturer's directions.
- B. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
- C. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
- D. Use only thinners approved by the paint manufacturer and only within recommended limits.

Application:

- A. General: Apply paint and coating according to manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.
- B. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
- C. Paint colors, surface treatments, and finishes are indicated in the schedules.
- D. Provide finish coats that are compatible with primers used.
- E. Do not dilute or alter graffiti-resistant coatings. Apply as packaged.
- F. The number of coats and the film thickness required are the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as

recommended by the manufacturer. Sand between applications where sanding is required to produce a smooth even surface according to the manufacturer's directions.

- G. Apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.
- H. Do not paint fire-treated plywood backboards to be used for telephone or electrical equipment unless permitted by authorities having jurisdiction.
- I. Omit primer on metal surfaces that have been shop-primed and touch-up painted.
- J. Do not apply graffiti-resistant coatings to the following surfaces:
 - 1. Horizontal or below-grade surfaces.
 - 2. Asphalt or other non-masonry materials.
 - 3. Painted or factory-finished surfaces.
- K. Avoid overspray, wind drift, and splash of graffiti-resistant coatings.
- L. Remove graffiti from treated surfaces using PRoSoCo "Defacer Eraser Graffiti Wipe" applied in accordance with manufacturer's written instructions.

Scheduling Painting:

- A. Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
- B. Allow sufficient time between successive coats to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.

Application Procedures:

- A. Apply paints and coatings by brush, roller, spray, or other applicators according to the manufacturer's directions.
- B. Brushes: Use brushes best suited for the material applied.
- C. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
- D. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- E. Minimum Coating Thickness: Apply materials no thinner than the manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.
- F. Block Fillers: Apply block fillers to concrete at a rate to ensure complete coverage with pores filled.
- G. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime-coated by others. Recoat primed and sealed surfaces where evidence of suction spots or

unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

- H. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling such as laps, irregularity in texture, skid marks, or other surface imperfections.
- I. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with specified requirements.

Cleaning:

- A. Cleanup: At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint and coating materials from the site.
- B. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

Protection:

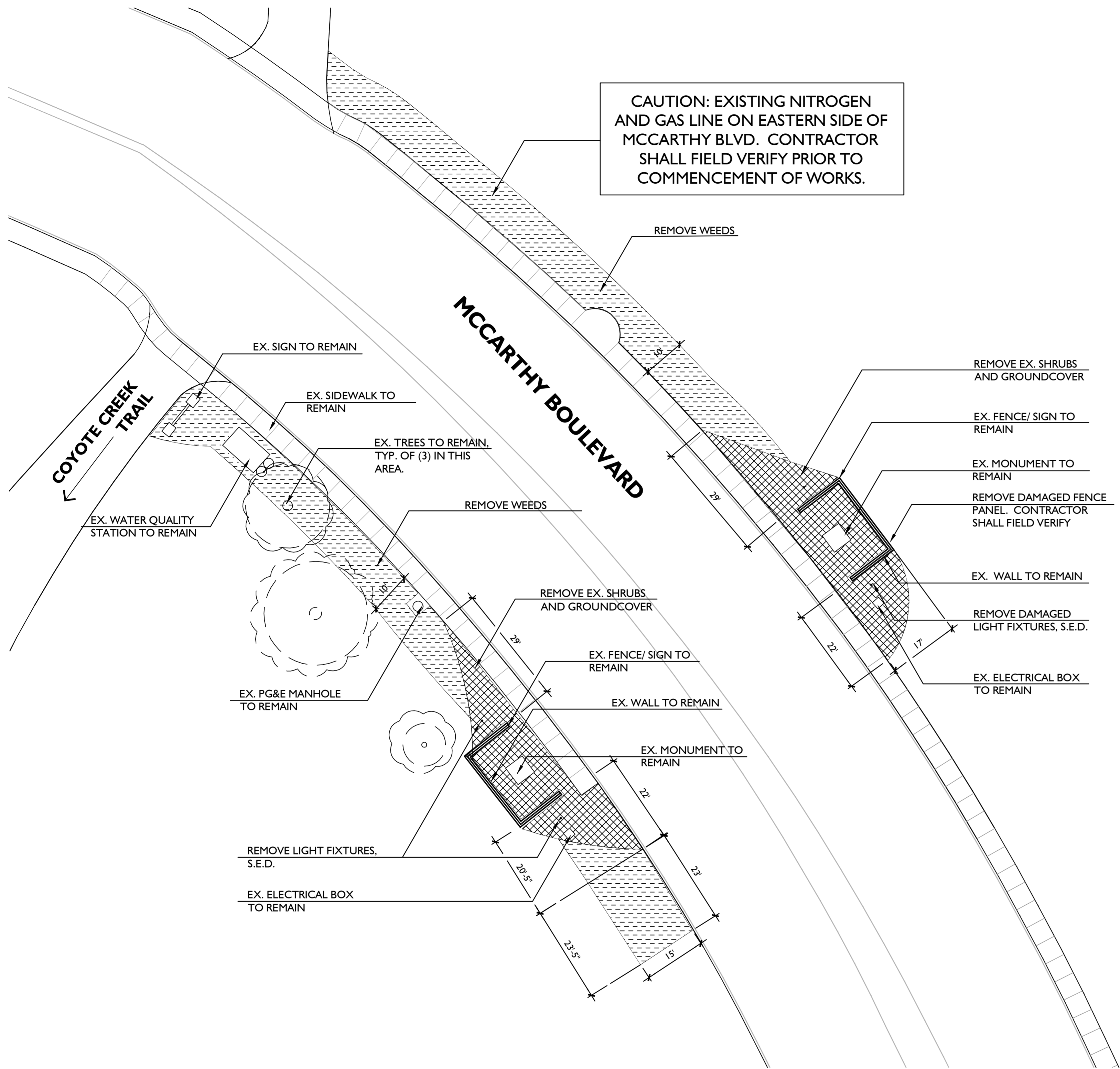
- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

Exterior Finish Schedule:

- A. References used in this schedule are based on systems described in the Painting and Decorating Contractors of America, Master Painters Institute, Architectural Painting Specification Manual (MPI).
- B. Steel - Unprimed:
 - 1. W.B. Light Industrial Coating (over waterborne primer): MPI EXT 5.1B
 - a. Prime Coat: Inorganic zinc.
 - b. Intermediate Coat: W.B. Light Industrial Coating.
 - c. Topcoat: W.B. Light Industrial Coating (semi-gloss).
- C. Steel - Primed:
 - 1. Quick Dry Enamel System: MPI EXT 5.1A.
 - a. Prime Coat: Q.D. primer.
 - b. Intermediate Coat: Q.D. enamel matching topcoat.
 - c. Topcoat: Q.D. enamel (semi-gloss).
- D. Steel – Galvanized (Not Chromate Passivated):
 - 1. Latex (over Waterborne Primer): MPI EXT 5.3H
 - a. Prime Coat: Waterborne primer.
 - b. Intermediate Coat: Exterior latex matching topcoat.
 - c. Topcoat: Exterior latex (semi-gloss)

Measurement and Payment:

"PAINTING & GRAFFITI-RESISTANT COATING" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work as shown on the plans and described in this Section shall be considered as part of "E-22 DECORATIVE METAL" and no additional allowance will be made therefore



DEMOLITION LEGEND

EXISTING SHRUBS AND GROUNDCOVER TO BE REMOVED, TYP.

EXISTING DECOMPOSED GRANITE PATH TO REMAIN, TYP.

EXISTING DECOMPOSED GRANITE TO BE REMOVED, TYP.

WEED REMOVAL

EXISTING HEADER BOARD TO BE REMOVED, TYP.

EXISTING TREE TO BE REMOVED

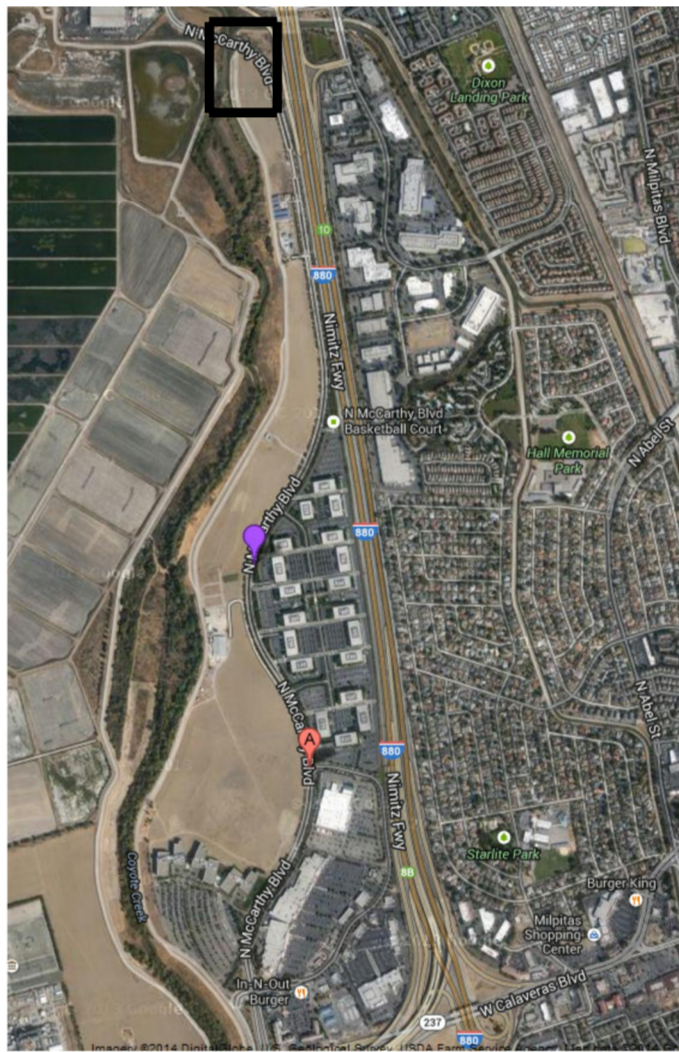
EXISTING TREE TO REMAIN AND TO BE PROTECTED DURING CONSTRUCTION, TYP.

4
L4.1

ABBREVIATIONS

BW	BOTH WAYS
ES	EQUAL SPACES
EW	EAST/WEST
EX	EXISTING
FG	FINISH GRADE
L.O.W.	LIMIT OF WORK
NTS	NOT TO SCALE
O.C.	ON CENTER
PA	PLANTING AREA
S.A.D.	SEE ARCHITECTURAL DRAWINGS
S.C.D.	SEE CIVIL DRAWINGS
S.E.D.	SEE ELECTRICAL DRAWINGS
S.S.D.	SEE STRUCTURAL DRAWINGS
TBD	TO BE DETERMINED
TYP.	TYPICAL

KEY MAP



NOTE: CONTRACTOR SHALL REPAIR EXISTING CURB IF DAMAGED DURING CONSTRUCTION

SEE E1.0/E1.1 FOR ADDITIONAL DEMOLITION INFORMATION

Designer Stamp:

Record Drawings

Project Engineer:	_____	Date:	_____
Designer:	_____	Date:	_____
Public Works Inspector:	_____	Date:	_____
Public Improvements Initially Accepted by the City Council on: _____			

Drawn By: JK Date: 08/15/14
Checked By: CG Date: 08/15/14
Designed By: GC Date: 08/15/14

Revisions			
Num.	Description	Engr. Aprv.	Date
1	1ST SUBMITTAL - 30% CDS		12/23/13
2	2ND SUBMITTAL - 90% CDS		3/21/14
3	3RD SUBMITTAL - 100% CDS		6/2/14
4	BID SET		8/15/14

CITY OF MILPITAS
ENGINEERING DIVISION

MCCARTHY BOULEVARD LIGHTING & LANDSCAPE IMPROVEMENTS PHASE I
CP#3402

DEMOLITION PLAN

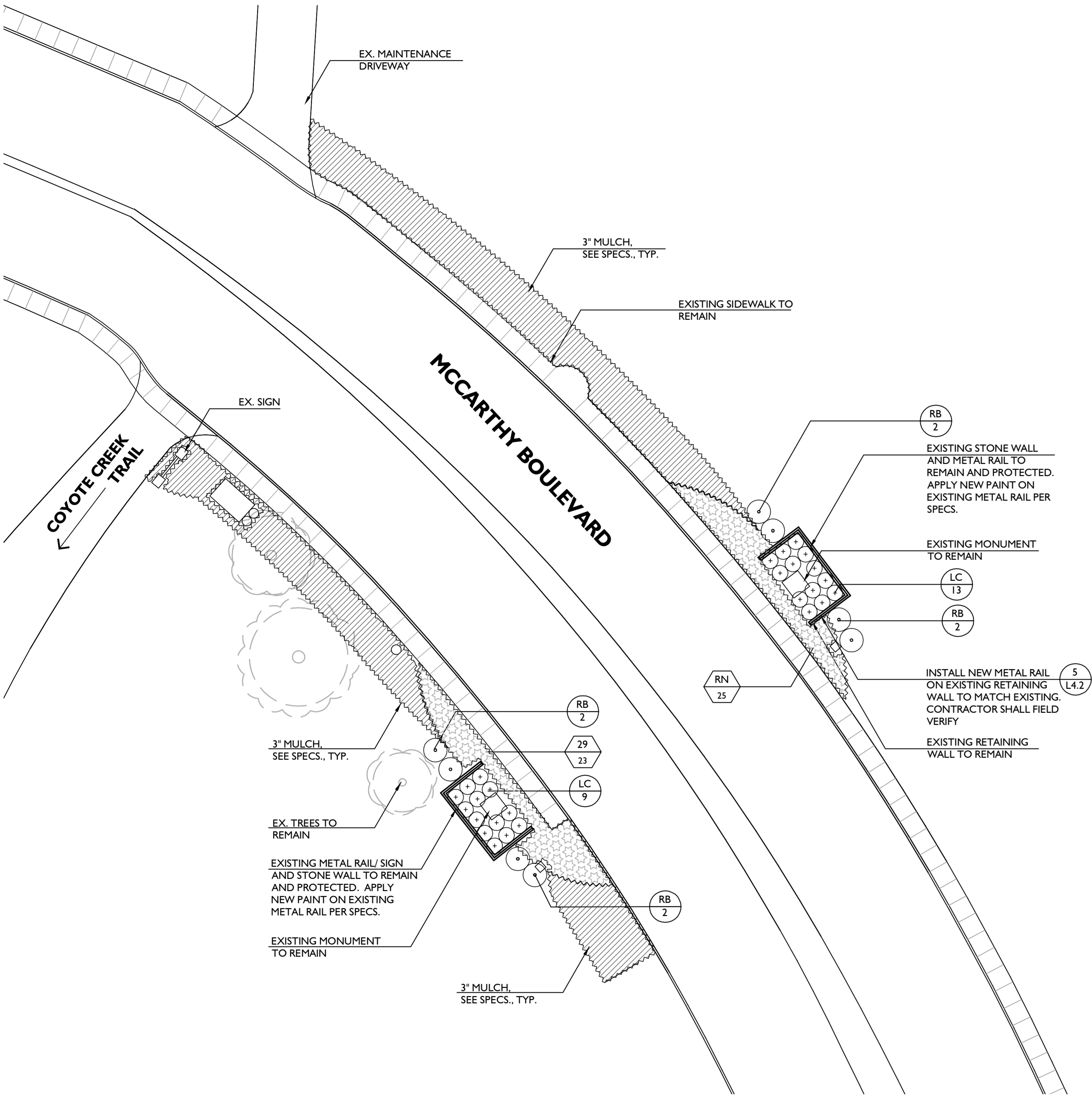
RECOMMENDED FOR BIDDING BY: _____ DATE: _____
Steven P. Erickson, CIP Manager

PROJECT NO.
CP#3402

Rec. Dwg No.
2-1189

SCALE:
1" = 16'

L1.3-R
SHEET 5 OF 29



PLANT LIST

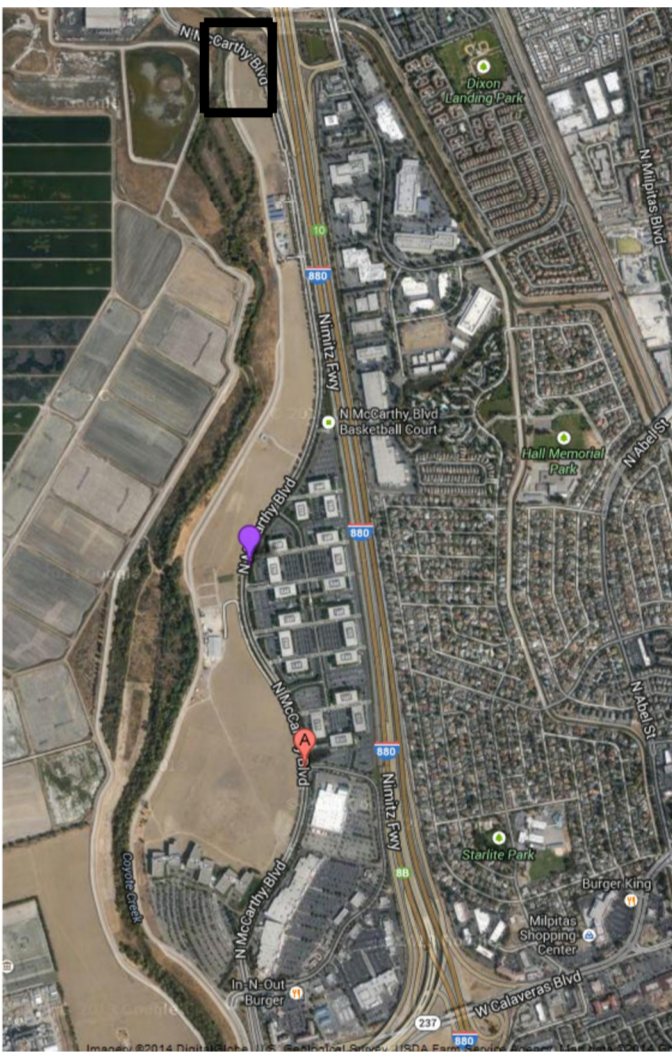
TREES					
Symbol	Botanical Name	Common Name	Size	Spacing	WUCOLS
LT	Lagerstroemia indica 'Tuscarora'	Crape Myrtle	24" Box	As Shown	LOW
PA	Platanus acerifolia	London Plane Tree	24" Box	As Shown	MOD
SHRUBS					
Symbol	Botanical Name	Common Name	Size	Spacing	Spacing
CP	Coleonema pulchellum 'Sunset Gold'	Golden Breath of Heaven	5 Gallon	3'-0" o.c.	MOD
DV	Dietes vegeta	Fortnight Lily	5 Gallon	4'-0" o.c.	LOW
LC	Leymus condensatus 'Canyon Prince'	Canyon Prince Wild Rye	5 Gallon	4'-0" o.c.	LOW
PM	Polystichum munitum	Western Sword Fern	1 Gallon	4'-0" o.c.	MOD
RU	Raphiolepis umbellata 'Minor'	India Hawthorne	5 Gallon	4'-0" o.c.	LOW
RB	Rosa Banksiae	Lady Banks Rose	2 Gallon	6'-0" o.c.	LOW
GROUNDCOVER					
Symbol	Botanical Name	Common Name	Size	Spacing	Spacing
CG	Ceanothus griseus horizontalis	Carmel Creeper	1 Gallon	6'-0" o.c.	LOW
FE	Festuca 'Elijah Blue'	Elijah Blue Fescue	1 Gallon	1'-6" o.c.	LOW
RN	Rosa x noatraum	Red Carpet Rose	1 Gallon	4'-0" o.c.	MOD
TA	Trachelospermum asiaticum	Asian Star Jasmine	1 Gallon	6'-0" o.c.	MOD

PLANT LEGEND

XX	TREE NAME	SEE PLANT LIST
##	QUANTITY	FOR ADDTL. INFO.
XX	SHRUB NAME	SEE PLANT LIST
##	QUANTITY	FOR ADDTL. INFO.
XX	GROUNDCOVER	SEE PLANT LIST
--	QUANTITY	FOR ADDTL. INFO.

NOTE:
SEE SHEET L4.1 FOR PLANTING DETAILS.

KEY MAP



PLANT PALETTE



Leymus condensatus 'Canyon Prince'
Canyon Prince Wild Rye

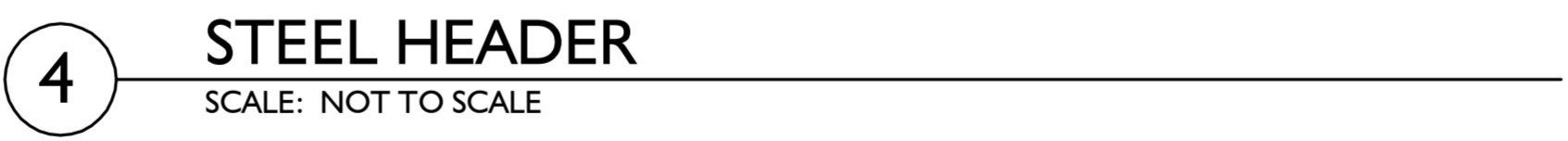



Rosa x noatraum
Carpet Rose Red



Rosa Banksiae
Lady Banks' Rose


<div>Designer Stamp: </div>	Record Drawings	<div>Drawn By: <u>JK</u> Date: <u>08/15/14</u> Checked By: <u>CG</u> Date: <u>08/15/14</u> Designed By: <u>GC</u> Date: <u>08/15/14</u></div>	Revisions		CITY OF MILPITAS ENGINEERING DIVISION	PROJECT NO. CP#3402
	Project Engineer: _____ Date: _____				MCCARTHY BOULEVARD LIGHTING & LANDSCAPE IMPROVEMENTS PHASE I CP#3402	Rec. Dwg No. 2-1189
	Designer: _____ Date: _____				PLANTING AND LAYOUT PLAN	SCALE: 1" = 16'
	Public Works Inspector: _____ Date: _____				RECOMMENDED FOR BIDDING BY: _____ DATE: _____ Steven P. Erickson, CIP Manager	L2.3-R SHEET <u>8</u> OF <u>29</u>
	Public Improvements Initially Accepted by the City Council on: _____					





Public Improvements Initially Accepted by
the City Council on: _____

Designed By: GC Date: 08/15/14



RECOMMENDED FOR BIDDING BY: _____ DATE: _____

Steven P. Erickson, CIP Manager

L4.2-R

SHEET **22** OF **29**